

CLAIMS

What is claimed is:

1. A system that facilitates state machine power management, comprising:
a state management component that receives at least one signal that is directed to a state machine; and
a coprocessor that responds to the signal in order to provide a timely response to the signal and facilitate state machine power management.
2. The system of claim 1, the state machine employs the state management component to receive the signal when the state machine transitions from a high power state to a lower power state.
3. The system of claim 2, the lower power state comprises one of a standby state, a suspend state, a hibernate state, a sleep state, a deep sleep state, and an off state.
4. The system of claim 1, further comprising an analysis component that interprets the signal.
5. The system of claim 1, further comprising a decision component that determines whether the coprocessor should respond to the signal.
6. The system of claim 1, the state management component is activated by one of the state machine requesting the services of the state management component and the state management component detecting the state machine transitioned to the lower power state.
7. The system of claim 1, the system consumes less or equal power when the coprocessor responds to the signal in comparison to when the state machine responds to the signal.

8. The system of claim 1, the state management component is employed to concurrently manage wake states for a plurality of state machines.
9. The system of claim 1, further comprising an intelligence component that facilitates at least one of interpreting the signal and distributing the signal for processing.
10. The system of claim 1, the state management component invokes the state machine to respond to the signal when the coprocessor cannot respond to the signal.
11. The system of claim 1, the signal is transmitted over one of a network, a backplane, and a bus.
12. The system of claim 1, the state management component is employed to reduce state machine load for a state machine in a full power state.
13. A method that manages wake states for state machines, comprising:
 - receiving a signal transmitted to a state machine;
 - interpreting the signal;
 - determining whether a coprocessor should respond to the signal; and
 - invoking the coprocessor to respond to the signal when it is determined that the coprocessor should respond to the signal.
14. The method of claim 13, the state machine employs the state management component when in a low power state.
15. The method of claim 13, the coprocessor is a low-power consuming device.
16. The method of claim 13, further comprising employing intelligence to facilitate at least one of interpreting the signal and determining whether the coprocessor should respond to the signal.

17. The method of claim 13, further comprising invoking the state machine to respond to the signal when it is determined that the coprocessor cannot respond to the signal.
18. The method of claim 13, further comprising receiving signals for a state machine in a full power state in order to reduce state machine load.
19. The method of claim 13, further comprising concurrently receiving signals directed to a plurality of state machines associated with at least one or more of a disparate network, a disparate bus, and a disparate backplane, wherein the coprocessor is employed to respond to at least one signal associate with at least one state machine.
20. A method that facilitates state machine power management, comprising:
 - activating a state manager to receive signals directed to one or more state machines residing in a low power state;
 - interpreting the signals to determine whether a coprocessor should respond to the signals; and
 - employing the coprocessor to respond to the signals.
21. The method of claim 20, the state manager is activated when at least one state machine transitions from a high power state to the low power state.
22. The method of claim 21, the low power state comprises one of a standby state, a suspend state, a hibernate state, a sleep state, a deep sleep state, and an off state.
23. The method of claim 20, the state manager is activated by one of a state machine request and detecting when a state machine transitions to the low power state.
24. The method of claim 20, further comprising employing at least one of the state machines to respond to the signals.

25. A data packet transmitted between two or more computer components that facilitates state machine power management, comprising:

a component that receives a signal transmitted to a state machine; a component that interprets the signal; a component that determines whether a coprocessor should respond to the incoming signal; and a component that invokes the coprocessor to respond to the incoming signal, wherein the coprocessor responds.

26. A computer readable medium storing computer executable components that facilitates state machine power management, comprising:

a component that receives a signal transmitted to a state machine in a lower power state;

a component that interprets the signal; and

a component that responds to the signal when the interpretation indicates that the signal should be responded to without the state machine so that the state machine remains in the lower power state.

27. A system that facilitates state machine power management, comprising:

means for receiving a signal directed to a state machines in a lower power state;

means for interpreting the signal to determine the processing requirements for the signal; and

means for responding to the signal without transitioning the state machines to a high power state.